SANTA CRUZ BIOTECHNOLOGY, INC.

Tollip (Kimmy-2): sc-59720

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Tollip (Toll-interacting protein) serves as a suppressor of innate immunity signaling and links the serine/threonine kinase IRAK to the IL-1 receptor complex upon receptor activation. Overexpression of Tollip in HEK293 cells inhibits NFkB activation in response to TLR2 and TLR4 signaling. Negative regulation of TLR signaling by Tollip may limit the production of proinflammatory mediators during inflammation and infection. Tollip forms a complex with Tom1 to regulate endosomal trafficking of ubiquitinated proteins. The Tollip protein shows ubiquitous expression in mouse.

REFERENCES

1. Burns, K., et al. 2000. Tollip, a new component of the IL-1RI pathway, links IRAK to the IL-1 receptor. Nat. Cell Biol. 2: 346-351.
2. Bulut, Y., et al. 2001. Cooperation of Toll-like receptor 2 and 6 for cellular activation by soluble tuberculosis factor and *Borrelia burgdorferi* outer surface protein A lipoprotein: role of Toll-interacting protein and IL-1 receptor signaling molecules in Toll-like receptor 2 signaling. J. Immunol. 167: 987-994.
3. Zhang, G. and Ghosh, S. 2002. Negative regulation of Toll-like receptor-mediated signaling by Tollip. J. Biol. Chem. 277: 7059-7065.
4. Katoh, Y., et al. 2004. Tollip and Tom1 form a complex and recruit ubiquitin-conjugated proteins onto early endosomes. J. Biol. Chem. 279: 24435-24443.
5. Li, T., Hu, J. and Li, L. 2004. Characterization of Tollip protein upon lipopolysaccharide challenge. Mol. Immunol. 41: 85-92.
6. Ohnuma, K., et al. 2005. CD26 mediates dissociation of Tollip and IRAK-1 from caveolin-1 and induces upregulation of CD86 on antigen-presenting cells. Mol. Cell. Biol. 25: 7743-7757.
7. Katoh, Y., et al. 2006. Recruitment of Clathrin onto endosomes by the Tom1-Tollip complex. Biochem. Biophys. Res. Commun. 341: 143-149.
8. Didierlaurent, A., et al. 2006. Tollip regulates proinflammatory responses to interleukin-1 and lipopolysaccharide. Mol. Cell. Biol. 26: 735-742.

CHROMOSOMAL LOCATION

Genetic locus: TOLLIP (human) mapping to 11p15.5; Tollip (mouse) mapping to 7 F5.

SOURCE

Tollip (Kimmy-2) is a mouse monoclonal antibody raised against a full-length recombinant protein corresponding to amino acids 1-247 of Tollip of mouse origin.

PRODUCT

Each vial contains 50 µg IgG_1 in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

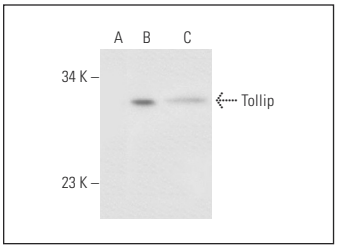
Tollip (Kimmy-2) is recommended for detection of Tollip of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Tollip siRNA (h): sc-63332, Tollip siRNA (m): sc-63333, Tollip shRNA Plasmid (h): sc-63332-SH, Tollip shRNA Plasmid (m): sc-63333-SH, Tollip shRNA (h) Lentiviral Particles: sc-63332-V and Tollip shRNA (m) Lentiviral Particles: sc-63333-V.

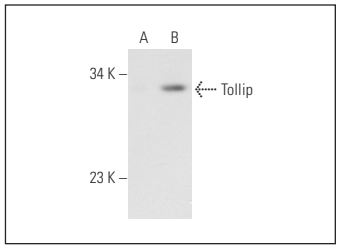
Molecular Weight of Tollip: 28 kDa.

Positive Controls: Tollip (m): 293T Lysate: sc-127686, Tollip (h): 293 Lysate: sc-112320 or EOC 20 whole cell lysate: sc-364187.

DATA



Tollip (Kimmy-2): sc-59720. Western blot analysis of Tollip expression in non-transfected 293T: sc-117752 (**A**), mouse Tollip transfected 293T: sc-127686 (**B**) and EOC 20 (**C**) whole cell lysates.



Tollip (Kimmy-2): sc-59720. Western blot analysis of Tollip expression in non-transfected: sc-110760 (**A**) and human Tollip transfected: sc-112320 (**B**) 293 whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.